Evidence-based Antimicrobial Stewardship: Sustainable Implementation in Primary Care

Who Are We?

EASSI-PC is a multi-state implementation trial funded by the Australian Government through the Medical Research Future Fund (MRFF) Clinical Trials Activity grant and led by general practitioners (GPs) and researchers from four Australian universities (Bond University, The University of Melbourne, The University of Newcastle, and Adelaide University).

Why is this Important?

Antibiotic misuse and/or overuse use is the main driver of antibiotic resistance. In Australia, over 10 million people are prescribed antibiotics annually - often for self-limiting infections. Most antibiotics are prescribed in general practice, making primary care central to efforts to reduce antibiotic resistance. Despite strong evidence for antimicrobial stewardship (AMS) interventions, real-world uptake in primary care remains limited. EASSI-PC aims to support GPs to implement evidence-based AMS strategies in real-world clinical settings.

What We Are Doing

EASSI-PC is evaluating whether implementing an integrated, multifaceted package of high-resource-supported AMS interventions (enhanced support arm) can reduce antibiotic prescribing in general practice compared with a low-resource-supported package (standard support arm).

To answer this question, participating practices will be randomised to receive one of two levels of implementation support. All practices will have access to our website [https://eassi-pc.org.au/], specifically the **EASSI-PC AMS Strategies Hub**, a section that provides an overview of evidence and resources supporting the different evidence-based AMS strategies (e.g., delayed prescribing, shared decision-making, audit and feedback, patient information sheets). **Table 1** summarises the support available in each study arm.

Table 1. Comparison of Standard Support and Enhanced Support packages

Standard Support	**Enhanced Support:** Standard Support **plus**
• Website access with all digital AMS resources • Digital decision aids, patient information sheets, AMS posters, eTG summary table, delayed prescribing resources, and self-audit tools • Access to recorded webinars with GP opinion leaders	• Printed and laminated resources • Personalised printed AMS and GP pledge posters • Practice-specific audit and feedback reports • Interactive webinars with GP opinion leaders

What Will Participating Practices & GPs Receive?

- A one-off practice reimbursement of $1,000.
- Complimentary Therapeutic Guidelines (eTG) subscriptions for participating GPs for the length of the trial.
- GPs may be eligible for Continuing Professional Development (CPD) points for completed activities.

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How Will the Study Be Conducted?

EASSI-PC aims to recruit approximately 100 general practices across Queensland, Victoria, New South Wales, and South Australia. Practices that have participated in studies aimed at improving antibiotic use within the previous two years are not eligible.

The trial will run for up to 24 months, comprising a minimum 12-month intervention period followed by an additional 6-month follow-up. Antibiotic prescribing and dispensing data will be collected with written consent obtained from participating GPs and practices. All data will be de-identified at the point of collection.

How Will Data Be Collected?

Participating practices will use Best Practice or MedicalDirector software. Data will be extracted using Patron. Patron is an established general practice data platform developed by the University of Melbourne that extracts and manages de-identified general practice data in accordance with established data governance, security, and access control frameworks. Dispensing data will be collected through the Pharmaceutical Benefits Scheme (PBS) and Medicare Benefits Schedule (MBS). Access to PBS and MBS data will be obtained through approved data requests supported by consent from participating GPs.

The Change We Are Creating

EASSI-PC will generate evidence to understand the level of support that general practices and GPs need to help reduce unnecessary antibiotic use, enhance patient safety, and ultimately slow antibiotic resistance. This will inform the delivery of scalable, sustainable solutions that embed AMS into everyday clinical care.

How to Participate

General practices and GPs interested in participating can register their interest by completing our short Expression of Interest form. The EASSI-PC research team will then contact you to provide further information about the study and discuss participation.

You can also scan the QR code to register your interest.